

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for indicating that claims 2 and 3 contain allowable subject matter.

Disposition of Claims

Claims 1-5 were pending in this application. By way of this reply, new claim 6 has been added. Accordingly, claims 1-6 are now pending in this application. Claim 1 is independent. The remaining claims depend, directly or indirectly, from claim 1.

Claim Amendments

Independent claim 1 has been amended by way of this reply to clarify that a linear light source includes a plurality of semiconductor light emitting devices approximately aligned and an optical component provided commonly to the plurality of semiconductor light emitting devices, having its focus on one of the plurality of light emitting devices. Further, claim 2 has been amended to correct a minor error. No new matter has been added by way of these amendments, as support for these amendments may be found, for example, in Figures 2 and 4 of the application and in paragraphs [0034], [0035], and [0040] of the application.

Double Patenting Rejection

Claims 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending U.S. Patent Application No. 10/775,276. A terminal disclaimer in compliance with 37 C.F.R. 1.321(c) has

been submitted herewith, as suggested by the Examiner. Thus, this rejection is now moot with respect to claim 1. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 1 and 4

Claims 1 and 4 are rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,032,960 issued to Katoh (hereinafter “Katoh”) in view of U.S. Patent No. 6,254,246 issued to Tiao *et al.* (“hereinafter Tiao”). Claim 1 has been amended in this reply to clarify the invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

The present invention is directed to a vehicular headlamp for emitting light in a predetermined direction. As discussed with reference to an exemplary embodiment of the invention shown in Figures 2-4 of the Instant Specification, a light source unit in accordance with an embodiment of the invention comprises a lens 120 and a light source 104 (*see* Specification, paragraphs [0033]-[0035]). The light source 120 includes a plurality of semiconductor light emitting devices 102a-102e that are approximately aligned in a predetermined direction (*see* Specification, paragraph [0034]). Further, as discussed with reference to Figure 4 of the Specification, a light source 120 in accordance with one embodiment of the invention is a linear light source extending in an approximately transverse direction of the automobile (*see* Specification, paragraph [0040]). The lens 104 has an optical center F (*i.e.*, a focus) positioned on one of the semiconductor light emitting devices (102c) (*see* Specification, paragraph [0035]).

Accordingly, amended independent claim 1 requires: (i) a linear light source including a plurality of semiconductor light emitting devices approximately aligned and (ii) an

optical component provided commonly to said plurality of semiconductor light emitting devices, having its focus on one of said plurality of semiconductor light emitting devices, operable to irradiate light emitted by said plurality of semiconductor light emitting devices toward said emitting direction.

Katoh, in contrast to the invention, does not show or suggest an optical component as required by amended independent claim 1. Specifically, Katoh does not show or suggest an optical component provided commonly to a plurality of light emitting devices. Further, Katoh does not show or suggest an optical component that has an optical center (*i.e.*, a focus) on one of the plurality of light emitting devices. Rather, as shown in Figures 5 and 6B of Katoh, Katoh discloses a convergent rod lens **34** that has a linear focus. In other words, rather than having a focus on single light emitting element, convergent rod lens **34** of Katoh has a linear focus that focuses on each of a plurality of light emitting diode lamps **32** (*see* Katoh, col. 5, lines 18-41; col. 6, lines 1-7). Thus, it would be clear to one skilled in the art that Katoh does not show or suggest an optical component provided commonly to a plurality of semiconductor light emitting devices, having its focus on one of the plurality of semiconductor light emitting devices, as required by amended independent claim 1.

Tiao, as discussed above with reference to Katoh, does not show or suggest a linear light source as required by amended independent claim 1. Further, Tiao does not show or suggest an optical component as required by amended independent claim 1. In stark contrast to the present invention, Tiao is directed to a low power illumination device such as that used in a desktop display screen (*see* Tiao, col. 1, lines 15-22, lines 46-61). Tiao does not show or suggest a linear light source. Rather, as shown in Figure 7A of Tiao, Tiao discloses a light source module **710** that comprises an array of light emitting devices **712** (*see* Tiao, col. 7, lines 41-58). Figure 3B of Tiao shows a light source **302** having an array of light emitting devices

306 (*see* Tiao, col. 4, lines 44-47). Thus, it would be clear to one skilled in the art that Tiao does not show or suggest a linear light source as required by the invention.

Similarly, as seen with respect to Figures 8A and 8B, Tiao does not show or suggest an optical component having an optical focus as required by the claimed invention. Instead, as shown in Figure 7A of Tiao, Tiao discloses a light converging lens 740 having converging on a columnar light converging lens 720, which then converges on a light emitting device 712 (*see* Tiao, col. 7, lines 41-58). Thus, it would be clear to one skilled in the art that Tiao does not show or suggest an optical component as required by the claimed invention.

Further, Applicant respectfully asserts that Katoh and Tiao are non-analogous art. One skilled in the art would not look to a disclosure of a light source device for use in an optical reader or to an improved desktop display screen, having features such as lower power consumption, to design a vehicular headlamp. All prior art references must be in the field of Applicant's endeavor, or be reasonably pertinent to the particular problem with which the Applicant was concerned, in order to be relied upon as a basis for rejection. *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992).

Further, Applicant notes that there is no motivation to combine the cited references. The Examiner cannot combine prior art references to render a claimed invention obvious by merely showing that all the limitations of the claimed invention can be found in the prior art references. There must be a suggestion or motivation to combine the references within the prior art references themselves. In other words, regardless of whether prior art references can be combined, there must be an indication within the prior art references expressing desirability to combine the references. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990) (emphasis added). Further, the present application *cannot be used as a guide* in reconstructing elements of prior art

references to render the claimed invention obvious. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991) (emphasis added).

One skilled in the art would not be motivated by Katoh, which is completely silent with respect to a lens having an optical focus on one of a plurality of light emitting elements, to incorporate the teachings of Tiao without the present application as a guide. The Examiner assumes that an optical component having an optical center on one of a plurality of light emitting elements would be obvious to one skilled in the art. However, Katoh provides no motivation to use such an optical component. Thus, one skilled in the art would not be motivated by Katoh to incorporate the teaching of Tiao, which is directed to an illumination device used in a display. Further, Tiao is silent with respect to a linear light source or an optical center of an optical component. One skilled in the art would not be motivated by Tiao, which is completely silent with respect to these limitations, to incorporate the teachings of Katoh without the present application as a guide. Thus, there is no motivation to combine the cited references.

In view of the above, (i) Katoh and Tiao, whether taken separately or in combination, fail to show or suggest the present invention as recited in amended independent claim 1, and (ii) Katoh and Tiao are not properly combinable. Thus, amended independent claim 1 is patentable over Katoh and Tiao. Claim 4, directly dependent from claim 1, is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claim 5

Claim 5 was rejected under 35 U.S.C. § 103(a) as being obvious over Katoh and Tiao in view of U.S. Patent No. 5,397,885 issued to Massieu *et al.* (hereinafter "Massieu"). As discussed above, independent claim 1 has been amended in this reply to clarify the present

invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

As discussed above, the present invention is directed to a vehicular headlamp for emitting light in a predetermined direction. Further, as discussed above, amended independent claim 1 requires a linear light source including a plurality of semiconductor light emitting devices approximately aligned, and an optical component provided commonly to the plurality of semiconductor light emitting devices, having its focus on one of the plurality of semiconductor light emitting devices, operable to irradiate light emitted by the plurality of semiconductor light emitting devices toward said emitting direction, which Katoh and Tiao fail to show or suggest.

Massieu, as discussed above with reference to Katoh and Tiao, does not show or suggest the above limitations. This is evidenced by the fact that Massieu is relied on merely in an attempt to render obvious limitations relating to an asymmetrical arrangement of a plurality of semiconductors (*see* Office Action of August 22, 2005, at page 4). Massieu is directed to a barcode label reader (*see* Massieu, abstract). As clearly seen with respect to Figure 2 of Massieu, it would be clear to one skilled in the art that Massieu does not contemplate an optical component as required by amended independent claim 1. Rather, as discussed above with reference to Katoh, Massieu discloses a prismlike lens 16 having a linear focus parallel to a long dimension of a window 11 (*see* Massieu, Figure 2; col. 5, lines 8-13).

Further, Applicant respectfully asserts that like Katoh and Tiao discussed above, Massieu is non-analogous subject matter. As Massieu is directed to a barcode label reader, one skilled in the art would not look to Massieu when designing a vehicle headlamp.

In view of the above, Katoh, Tiao, and Massieu, whether taken separately or in combination, fail to show or suggest the present invention as recited in amended independent

claim 1, from which claim 5 depends. Thus, claim 5 is patentable over Katoh, Tiao, and Massieu. Accordingly, withdrawal of this rejection is respectfully requested.

New Claim

New independent claim 6 has been added by way of this reply. No new matter has been added by way of new independent claim 6, as support for this claim may be found, for example, in Figure 11 and in paragraphs [0063] and [0067] of the Instant Specification.

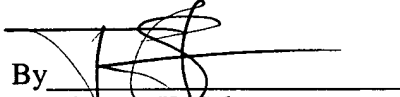
Claim 6 requires an optical component comprising a reflecting mirror surrounding at least one direction of a plurality of semiconductor light emitting devices, the reflecting mirror comprising at least in part thereof an elliptical plane, and the reflecting mirror having a focus on one of said plurality of semiconductor light emitting devices, operable to irradiate light emitted by the plurality of semiconductor light emitting devices toward the emitting direction. As discussed above, the cited prior art references fail to show or suggest limitations in claim 1 that are similar to limitations of claim 6. Accordingly entry and allowance of new claim 6 is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 02008/147001).

Dated: November 22, 2005

Respectfully submitted,

By 

Thomas K. Scherer
Registration No.: 45,079
OSHA · LIANG LLP
1221 McKinney St., Suite 2800
Houston, Texas 77010
(713) 228-8600
(713) 228-8778 (Fax)
Attorney for Applicant